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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/673,614 10/19/00 GRIMALDI

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EXAMINER

MMC2/0327

SUGHRUE MION ZINN
MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20037-3213

NGUYEN, P

ART UNIT

PAPER NUMBER

2833

DATE MAILED:

03/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/673,614

Applicant(s)

GRIMALDI ET AL.

Examiner

Phuongchi T Nguyen

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892) 17) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 18) ☐ Notice of Informal Patent Application (PTO-152)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 19) ☐ Other:

Art Unit: 2833

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "a connector characterized in that it includes means for guiding the spring contact into position in the housing" in claim 6, and "a connector characterized in that it includes means for retaining the spring contact in the housing" in claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

2. Claims 5-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, line 6, "the plane (13.1)" lacks proper antecedent basis.

line 7, "the base (13)" lacks proper antecedent basis.

line 8, "the respective planes (2.1, 3.1)" lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-8 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by

Bricaud et al (US6053776).

Art Unit: 2833

In regards to claim 1, Bricaud discloses a spring contact (44) for use in a connector, which spring contact (44) is substantially U-shaped and has two branches (82, 60) and a base (66) joining the two branches (82, 60) at one end, each branch (82, 60) being adapted to make electrical contact with a device, characterized in that the two branches (82, 60) lie in two diverging planes (adjacent 82, 60) and the intersection of the two planes (adjacent 82, 60) is within the base (66) of the U-shape (see figure 11).

In regards to claim 2, Bricaud discloses the spring contact (44) characterized in that one branch (82) and the base (66) are coplanar (see figure 10).

In regards to claim 3, Bricaud discloses the spring contact (44) characterized in that the electrical contact (44) of at least one branch (82) is at the free end (86) of the branch (82) (see figure 10).

In regards to claim 4, Bricaud discloses the spring contact (44) characterized in that one branch (82) is adapted to come into contact with a printed circuit (16) and the other branch (60) is adapted to come into contact with a battery or a device (see figure 16). Since one branch (82) and the base (66) are coplanar, base (66) contacts a printed circuit (16) as shown in figure 16, one branch (82) also contacts a printed circuit (16).

In regards to claim 5, Bricaud discloses an electrical connector (40) having a first face (46) and a second face (48) opposite the first face (46), the connector (40) including at least one housing (adjacent 46, 48) for receiving a spring contact (44) and opening (52) onto both faces (46, 48), characterized in that the spring contact (44) is positioned in the housing (adjacent 46,

Art Unit: 2833

48) so that a plane (upper surface of 16) containing a base (66) of the U-shape is substantially parallel to the respective planes of the faces (46, 48) of the connector (40) (see figures 15-17).

In regards to claim 6, Bricaud discloses the connector (40) characterized in that it includes means (adjacent 120) for guiding the spring contact (44) into position in the housing (adjacent 46, 48) (see figure 4).

In regards to claim 7, Bricaud discloses the connector (40) characterized in that it includes means (adjacent 50) for retaining the spring contact (44) in the housing (adjacent 46, 48) (see figure 4).

In regards to claim 8, Bricaud discloses the connector characterized in that one branch (60) of the spring contact (44) projects from the housing (adjacent 46, 48) (see figure 15).

In regards to claim 10, Bricaud discloses the connector characterized in that one face (46, 48) of the connector (44) has a pick-up area (hole) substantially at the center of said face (46, 48) (see figure 2).

In regards to claim 11, Bricaud discloses the connector having lateral faces (92) joining the first and second faces (46, 48), characterized in that the lateral faces (92) include at least one recess (70) and a free end (86) of one branch (82) of the spring contact (44) projects into the recess (98) (see figure 5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would

Art Unit: 2833

have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bricaud et al (US6053776) in view of Suzuki (US5865642).

Bricaud's 776 lacks the spring contact positioned in parallel but in opposite way. However, Suzuki teaches the spring contacts in two adjacent housings being positioned so that they are substantially parallel but the opposite way round to each other (see figure 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector of Bricaud's 776 by having a spring contact with an opposite round way as taught by Suzuki to arrange one branch of one contact being adjacent the other branch of the adjacent contact.

7. Yumibe et al (US5378160) (figure 1) are cited to show in the connector art having the spring contacts in two adjacent housings are positioned so that they are substantially parallel but the opposite way round to each other.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchi T Nguyen whose telephone number is (703) 305-0729. The examiner can normally be reached on Monday through Thursday from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (703) 308-2319. The fax phone numbers for the

Art Unit: 2833

organization where this application or proceeding is assigned are (703) 305-7723 for regular communications and (703) 305-7723 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-7722.

March 20, 2001

A handwritten signature in black ink, appearing to read "Gary Paumen", with a stylized flourish at the end.

Gary Paumen
Primary Examiner